DIGIPLEX™

PARADOX

LISTED

# Access Control LCD Keypad Module with Built-in Reader (V2.0)

DGP2-641R

## Reference and Installation Manual

PARADOX®
SECURITY SYSTEMS

# TABLE OF CONTENTS


1.0 INTRODUCTION ..... 1
- 1.1 Specifications ..... 2

2.0 INSTALLATION ..... 3
- 2.1 Mounting the DGP2-641R on Metal ..... 4
- 2.2 Connecting Keypad Zones ..... 4

3.0 PROGRAMMING ..... 8
- 3.1 Entering Module Programming Mode ..... 8
- 3.2 Programming Methods ..... 9
  - *3.2.1 Feature Select Programming ..... 9*
  - *3.2.2 Decimal Programming ..... 9*
- 3.3 Module Broadcast ..... 9

4.0 SYSTEM OPTIONS ..... 10
- 4.1 Partition Assignment ..... 10
- 4.2 Display Access Code Entry ..... 10
- 4.3 Display Exit Delay Timer ..... 10
- 4.4 Display Entry Delay Timer ..... 11
- 4.5 Confidential Mode ..... 11
- 4.6 Confidential Mode Timer ..... 12
- 4.7 Time Display Option ..... 12
- 4.8 Muting ..... 12
- 4.9 Beep on Exit Delay ..... 13
- 4.10 Chime on Zone Closure ..... 13
- 4.11 Beep on Trouble ..... 13
- 4.12 Keypad Tamper Enable ..... 14
- 4.13 Time Format ..... 14
- 4.14 Combus Voltmeter ..... 14

5.0 ACCESS CONTROL OPTIONS..... 15
5.1 Assigning Doors To Partitions ..... 15
5.2 Door Lock Options ..... 16
*5.2.1 Unlock on REX (Request For Exit)* ..... *16*
*5.2.2 Door Unlocked Period* ..... *16*
*5.2.3 Door Unlocked Period Extension* ..... *16*
*5.2.4 Relock Door* ..... *17*
*5.2.5 Door Unlocked Schedule* ..... *17*
*5.2.6 Card Activates Door Unlocked Schedule* ..... *18*
5.3 Door Left Open Options ..... 18
*5.3.1 Door Left Open Access Alarm* ..... *19*
*5.3.2 Door Left Open Interval Before Access Alarm* ..... *19*
*5.3.3 Door Left Open Pre-Alarm* ..... *19*
*5.3.4 Door Left Open Pre-Alarm Timer* ..... *20*
*5.3.5 Door Left Open Alarm Feedback* ..... *20*
*5.3.6 Beep Timer For Door Left Open Alarm* ..... *21*
5.4 Door Forced Open Options ..... 21
*5.4.1 Door Forced Open Access Alarm* ..... *22*
*5.4.2 Door Forced Open Feedback* ..... *22*
*5.4.3 Beep Timer For Door Forced Open Alarm* ..... *23*
5.5 PIN Entry ON Keypad ..... 23

6.0 MESSAGE PROGRAMMING ..... 24

7.0 PROGRAMMING SECTIONS ..... 27

8.0 GLOSSARY ..... 31

# 1.0 INTRODUCTION

The Digiplex™ Series Security Systems (DGP-848/DGP-NE96) are advanced technology security systems that will provide reliable security protection and powerful features that are easy to use. The elegant and user-friendly Digiplex LCD Keypad Module with Built-in Reader (DGP2-641R) will allow easy access to the security system's functions and information at the touch of a button. Since all programming is accomplished through the keypad, please read this manual carefully.

As well as normal security system functions, the DGP2-641R can also be used for access control. Access control is designed to monitor and control the access for up to 32 designated doors without the need of an additional control panel. The events that occur on an access control door can be logged in the control panel's Event Buffer and can be viewed through the keypad.

Every access control door requires an Access Control LCD Keypad Module with Built-in Reader (DGP2-641R), a REX device (recommended: Paradoor 460), a door contact and a locking device.

Door contacts can also be assigned to zones in the control panel to link the doors to the Digiplex alarm system. This will allow you to use the same door for the access control system and the alarm system. Only two of the access control features require that the access control door's door contact be assigned to a zone: *Burglar Alarm on Forced Door* and *Access to Armed Access Control Doors* (refer to the *DGP-848* or *DGP-NE96 Reference & Installation Manual*).

## 1.1 Specifications

| | |
|---|---|
| Power input: | 9 to 16 VDC, 100mA maximum |
| PGM current limit: | 50 mA |
| Number of inputs: | 2 |
| Power indication: | Yellow LED on |
| Locate indication: | Green and yellow LEDs flash simultaneously |
| Combus fault indication: | Red and yellow LEDs flash alternately |
| Tamper Switch: | Yes (also used to deactivate locate) |
| LCD: | Super Twisted Nematic display (STN), wide viewing angle, 2 lines of 16 characters, backlight and contrast adjustable |
| Read Range*: | CR-R700 ISO PosiCard - up to 10cm (4”)<br>CR-R704 Key Tag - up to 6cm (2.5”) |
| Frequency: | Exciter field - 125 KHz Pulse Modulated<br>Receive Low Frequency - 12.500 KHz<br>Receive High Frequency - 15.625 KHz |
| Compatibility: | Any DGP-NE96 control panel or DGP-848 control panel V2.20ACC and higher |

***Specifications may change without prior notice.***

** The specified read range assumes no electrical interference and that the card is presented parallel to the reader, with the reader installed and operated as outlined in this manual. The read range will vary depending on the type of card used. The larger the card, the greater the read range. The read range may decrease if the reader is mounted on metal.*

# 2.0 INSTALLATION

The DGP2-641R is connected to the control panel's combus in a star and/or daisy chain configuration. This 4-wire combus provides power and two-way communication between the control panel and all modules connected to it. Connect the four terminals labeled red, black, green and yellow of each keypad to the corresponding terminals on the control panel (refer to Figure 1 on page 5). Refer to the *DGP-848 or DGP-NE96 Reference & Installation Manual* for the maximum allowable installation distance from the control panel.

See Figure 4 on page 7 for connection drawings for the REX device, locking device and door contact to the desired DGP2-641R keypad module. A typical installation is shown in Figure 2 on page 6.

*The door contact follows the control panel's EOL definition. When EOL is enabled and the door contact is not used, place a 1kΩ resistor across the keypad's Z1 and BLK input terminals. If EOL is not enabled, use a jumper. If the REX device is not used, place a jumper across the keypad's Z2 and BLK input terminals.*

***Please consider the following when installing the DGP2-641R:***

- ***Maintain all DGP2-641R wiring a minimum of 30cm (12") away from other wiring such as AC power, computer data wiring, telephone wiring, etc.***
- ***Avoid installing within 1.1m (3.5ft.) of computer monitors or CRTs. The minimum distance will vary depending on the type of monitor or CRT.***
- ***Avoid installing in proximity to sources of broad spectrum EMI noise such as motors, pumps, generators, DC to AC converters, uninterruptible power supplies, AC switching relays, light dimmers, computer monitors and CRTs.***
- ***Avoid installing in proximity to potential sources of RF signal transmitters such as cellular phones, two-way radios, etc.***

## 2.1 Mounting the DGP2-641R on Metal

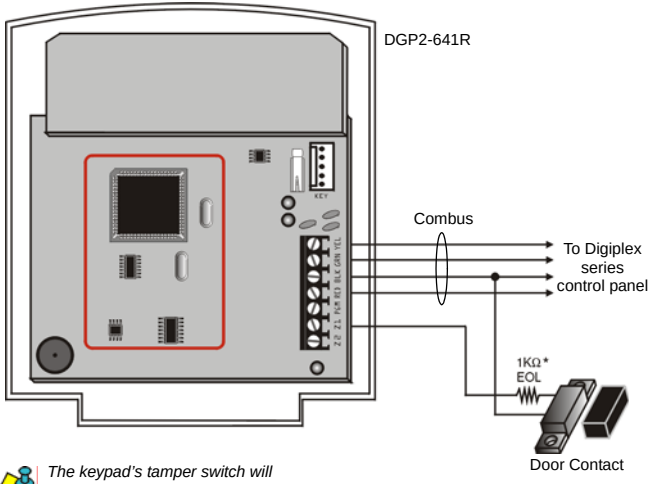
Although metal may decrease the read range of it's built-in reader, the DGP2-641R can be mounted on metal. However, do not box in or surround the DGP2-641R with any kind of metal. If the keypad module must be installed in any kind of metal enclosure, ensure that the face of the DGP2-641R is not covered and that there is at least 4cm (1.6") between the keypad module and the metal on all sides of the DGP2-641R.

## 2.2 Connecting Keypad Zones

Each keypad has one traditional hardwired input terminal, allowing you to connect one detector or door contact directly to the keypad. For example, a door contact located at the entry point of an establishment can be wired directly to the input terminal of the entry point keypad instead of wiring the door contact all the way to the control panel.

Connect the device to the keypad's input terminal as shown in Figure 1 on page 5. In order to communicate its status to the control panel, devices connected to the keypad's input terminal must be assigned to a zone in the control panel and the zone's parameters must be defined. For more information on zone assignment, please refer to the *DGP-848 or DGP-NE96 Reference & Installation Manual*. Please note that even with the ATZ (zone doubling) feature enabled, the keypad supports only one detection device.

**Figure 1: Connecting the Keypad and Keypad Zone**




*The keypad's tamper switch will communicate its status to the control panel via the combus.*

* The keypad zone follows the control panel's EOL definition. The zone speed is set at 600mS and cannot be programmed.

**Figure 2: Typical Access Control Installation**

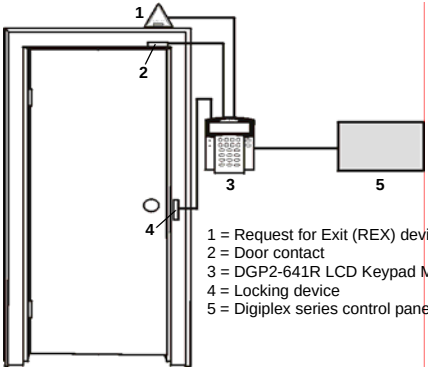
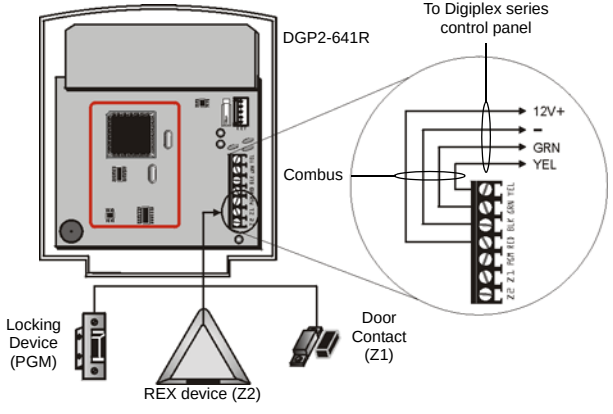
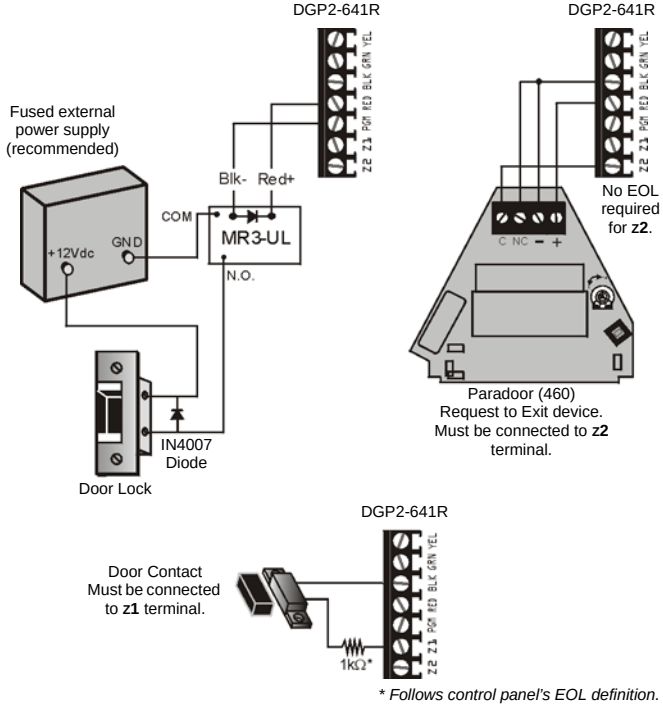



**Figure 3: Access Control Overview**



## Figure 4: Access Control Connections




** Follows control panel's EOL definition.*

***If a door contact is not being used, install a jumper or a 1kΩ resistor across the BLK and z1 terminals depending on the control panel's EOL definition.***

***If the REX (Request for Exit) device is not being used, place a jumper across the BLK and z2 terminals.***

# 3.0 PROGRAMMING

Programming the DGP2-641R keypad module is simple. Enter Module Programming Mode, enter the desired section followed by the required data. When programming the keypad, use the keypad's programming sheets (found in the *Digiplex Series Modules' Programming Guide*) to keep track of which sections were programmed and how. We strongly recommend you read this entire manual before you begin programming.

This module can also be programmed using the WinLoad Installer Upload/Download Software. For more information, refer to the WinLoad instructions or visit our Web site at www.paradox.ca.

## 3.1 Entering Module Programming Mode

The keypad, like all other modules in the system, is programmed through the control panel. To do so, you must first enter Module Programming Mode:

1. From Normal Mode press and hold the **[0]** key.
2. Enter the **[INSTALLER CODE]** (by default 000000).
3. Enter section **[953]** (DGP-848) / **[4003]** (DGP-NE96).
4. Enter the keypad's 8-digit **[SERIAL NUMBER]**.
5. Enter the 3-digit **[SECTION]** you want to program.
6. Enter the required **[DATA].**

The control panel will then redirect all programming to the selected keypad. Every time the **[CLEAR]** key is pressed it will revert to the preceding step, unless entering in data in which case it will erase the current data entry. Please note that the serial number is located on the keypad's PC board or enter section **[000]** in Step 3 to view the keypad's serial number.

## 3.2 Programming Methods

The following methods can be used when programming the keypad:

### 3.2.1 Feature Select Programming

Some sections are programmed by enabling or disabling options. Within the sections, numbers from **[1]** to **[8]** represent a specific keypad option. Press the key corresponding to the desired option and the digit will appear in the display. This means the option is enabled. Press the key again to remove the digit from the display thereby disabling the option. Press **[ENTER]** when options are set.

### 3.2.2 Decimal Programming

Some sections require that a decimal value be entered. In this method, any digit from 000 to 255 can be entered.

## 3.3 Module Broadcast

The control panel's Module Broadcast feature can be used to copy the contents of one keypad to one or many other keypads.

1. From Normal Mode press and hold the **[0]** key.
2. Enter **[INSTALLER CODE]** (default: 000000).
3. Enter section **[954]** (DGP-848) / **[4004]** (DGP-NE96).
4. Enter the **[SERIAL #]** of the source keypad. The *source* is the programmed keypad whose data you want to copy to other keypads.
5. Enter the **[SERIAL #]** of the destination keypads. The *destination* is the keypad(s) you want to program with the source's data. If you want to program more than one keypad with the source's data, enter the serial numbers of the keypads one at a time.
6. Once you have entered the serial numbers of the keypads you want to program, press the **[ACC]** key.

# 4.0 SYSTEM OPTIONS

## 4.1 Partition Assignment

SECTION [001]: OPTIONS [1] TO [8]

Keypads in the system can be assigned to one or more partitions. Options **[1]** to **[8]** represent partitions 1 through 8 respectively. To assign the keypad to a partition, enable the option that corresponds to the desired partition. *By default, partitions 1 to 8 are enabled.*

***Section [001] options [5] to [8] can only be used if the keypad is connected to a DGP-NE96 control panel.***

## 4.2 Display Access Code Entry

SECTION [003]: OPTION [1]

The digits of the User Access Codes can be displayed on the LCD screen when they are entered.

*Option **[1]** OFF = Digits are replaced by a "*" (default)*
Option **[1]** ON = Access Code digits will be displayed

## 4.3 Display Exit Delay Timer

SECTION [003]: OPTION [2]

Based on the user's needs, an Exit Delay Timer will be programmed to provide the user time to exit the partition before the system is armed. The Exit Delay Timer's countdown can be displayed on the LCD screen.

*Option **[2]** OFF = Will not display Exit Delay timer (default)*
Option **[2]** ON = LCD screen will display Exit Delay timer

## 4.4 Display Entry Delay Timer

SECTION [003]: OPTION [3]

The Entry Delay Timer will be programmed to provide the user time to enter their User Access Code before the alarm is triggered. The Entry Delay Timer's countdown can be displayed on the LCD screen.

*Option **[3]** OFF = Will not display the Entry Delay Timer (default)*
Option **[3]** ON = LCD screen will display Entry Delay Timer

## 4.5 Confidential Mode

SECTION [003]: OPTIONS [4] AND [5]

If Confidential Mode is enabled and no actions are performed on the keypad for a period of time, the LCD will appear as shown in Figure 5 (page 12) and the “AC” and “STATUS” LED will be OFF. The period of time in which no action is performed is defined by the Confidential Mode Timer (005-255 seconds; refer to section 4.6 on page 12). Confidential Mode is activated by enabling option **[4]**. Option **[5]** regulates whether the LCD screen will be activated at the touch of a button or only when an access code is entered.

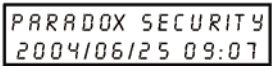
Once the LCD screen is activated (by code or button), Normal Mode will appear and display the date and time as shown in Figure 5 on page 12. The status of the areas, the open zones for every area the keypad is assigned, the Alarm Memory Display (if necessary) and the Trouble Display (if necessary. See *DGP-848 or DGP-NE96 User Manual*) will also scroll on the LCD screen. *By default, options **[4]** and **[5]** are OFF.*

Section [003]:
*Option **[4]** OFF = Normal Mode*
Option **[4]** ON = Confidential Mode

*Option **[5]** OFF = LCD screen activated by entering an access code*
Option **[5]** ON = LCD screen activated by pressing a button

**Figure 5: LCD Screen**

Screen in *Normal Mode*:




Screen in *Confidential Mode*:

## 4.6 Confidential Mode Timer

SECTION [007]

Section **[007]** determines the amount of time without action before the keypad enters Confidential Mode. For more information on Confidential Mode, refer to “Confidential Mode” on page 11. The Confidential Mode Timer can be set from 005 seconds to 255 seconds. *Default: 120 secs.*

## 4.7 Time Display Option

SECTION [003]: OPTION [8]

The LCD keypad comes with a time display option that can display the date as year/month/day or as day/month/year.

*Option **[8]** OFF = Date displayed as yy/mm/dd (default)*
Option **[8]** ON = Date displayed as dd/mm/yy

## 4.8 Muting

SECTION [004]: OPTION [1]

The keypad can be programmed **not** to emit audible sounds, including Chimed zones. During Muting, the keypad will **only** emit the Confirmation Beep, Rejection Beep, and beep when a button is pressed.

*Option **[1]** OFF = Audible sounds (default)*
Option **[1]** ON = Mute

## 4.9 Beep on Exit Delay

SECTION [004]: OPTION [2]

The keypad can beep once every second during the Exit Delay Timer. During the final 10 seconds, it will beep more rapidly to provide a final warning before the area is armed.

Option **[2]** OFF = Exit Delay beep disabled
*Option **[2]** ON = Exit Delay beep enabled (default)*

## 4.10 Chime on Zone Closure

SECTION [004]: OPTION [4]

During the Chime Zone Time Period that the user sets, the keypad can emit an intermittent beep whenever a zone with the Chime feature enabled closes (see *DGP-848 or DGP-NE96 User Manual* for details on Chime Zones). If the user does not set the Chime Zone Time Period and this option is enabled, the Chime Zones will always beep upon closure.

*Option **[4]** OFF = Chime on Zone Closure disabled (default)*
Option **[4]** ON = Chime on Zone Closure enabled

## 4.11 Beep on Trouble

SECTION [005]: OPTIONS [1] TO [4]

Potential troubles have been sorted into groups. With these options enabled, the keypad will emit an intermittent beep tone whenever a trouble condition from the Trouble Groups occurs in the system. The intermittent beep will remain activated until the user enters the *Trouble Display* or if the trouble is resolved. For a list of the troubles, see the *DGP-848 or DGP-NE96 Reference and Installation Manual*. The intermittent beep will be re-initialized whenever the trouble condition re-occurs.

*Option **[1]** OFF = Beep disabled: System Troubles and Clock Loss*
Option **[1]** ON = Beep enabled: System Troubles and Clock Loss

*Option **[2]** OFF = Beep disabled: Communicator Troubles*
Option **[2]** ON = Beep enabled: Communicator Troubles

*Option **[3]** OFF = Beep disabled: Module and Combus Troubles*
Option **[3]** ON = Beep enabled: Module and Combus Troubles

*Option **[4]** OFF = Beep disabled: all Zone Troubles*
Option **[4]** ON = Beep enabled: all Zone Troubles

## 4.12 Keypad Tamper Enable

SECTION [006]: OPTION [5]

With tamper enabled and the on-board tamper switch is triggered, a Tamper report will be sent to the control panel via the combus.

*Option **[5]** OFF = Keypad's tamper is disabled (default)*
Option **[5]** ON = Keypad's tamper is enabled

## 4.13 Time Format

SECTION [005]: OPTION [7]

This feature determines whether the time shown on the screen will be displayed using the International time format (24Hr. clock) or the US time format (AM/PM).

*Option **[7]** OFF = Time uses the International time format (default).*
Option **[7]** ON = Time uses the US time format.

## 4.14 Combus Voltmeter

The combus voltmeter displays the real-time voltage and verifies if the combus is supplying sufficient power at the keypad module's location. Readings will appear on the LCD screen. A reading of 10.5V indicates that the voltage is too low. This may occur when too many modules are connected to the combus, a module is installed too far from the panel or if the system is running on the battery. In some cases adding an

external power supply may correct the situation.

1. From Normal Mode press and hold the **[0]** key.
2. Enter the **[INSTALLER CODE]** (by default 000000).
3. Press **[ACC].**

*The voltage may drop during the control panel battery test.*

# 5.0 ACCESS CONTROL OPTIONS

## 5.1 Assigning Doors To Partitions

SECTION [002]: OPTIONS [1] TO [8]

Although the keypad can be programmed to display the status of various partitions, the Access Control door can be assigned to one or more partition(s) in the alarm system. This means that the actions performed with the Access Control Card will be directly linked to the partition(s) assigned to that door. For example, the keypad is assigned to all eight partitions (see section 4.1 on page 10), but the door is assigned to Partition 2. When the user presents the Access Control Card to the door's reader to arm the partition, only Partition 2 will arm.

*Option **[1]** ON = Door assigned to Partition 1(default)*
Option **[2]** ON = Door assigned to Partition 2
Option **[3]** ON = Door assigned to Partition 3
Option **[4]** ON = Door assigned to Partition 4
Option **[5]** ON = Door assigned to Partition 5 (DGP-NE96 only)
Option **[6]** ON = Door assigned to Partition 6 (DGP-NE96 only)
Option **[7]** ON = Door assigned to Partition 7 (DGP-NE96 only)
Option **[8]** ON = Door assigned to Partition 8 (DGP-NE96 only)
OFF = Access Control Cards will not be able to arm and/or disarm partitions from the door's reader

## 5.2 Door Lock Options

The Door Lock Options allow you to program the door lock to suit its environment or security requirements.

### 5.2.1 Unlock on REX (Request For Exit)

SECTION [006]: OPTION [8]

When the REX device detects movement, it can permit passage with or without turning the door handle. If this option is on, the door is unlocked when the REX device detects movement and users on either side of the door will be able to open the door. If this option is off, the door will unlock once the handle is turned only on the REX device's side.

*Option **[8]** OFF = Unlock on REX disabled (default)*
Option **[8]** ON = Unlock on REX enabled

### 5.2.2 Door Unlocked Period

SECTION [008]

The Door Unlocked Period is the time the door can remain unlatched after access is granted or after a Request for Exit is received. Enter any value between 001 and 255 to determine the seconds the door can remain unlatched. *Default = 5 secs.*

### 5.2.3 Door Unlocked Period Extension

SECTION [009]

The Door Unlocked Period Extension is the amount of time added to the Door Unlocked Period in section **[008]**, which leaves the door unlatched longer. This will allow those with this feature enabled on their User Access Codes extra time to enter, which may be useful for the physically challenged or for seniors. Enter any value between 001 and 255 to determine the number of seconds to be added to the time programmed in section **[008]**. *Default = 15 secs.*

### 5.2.4 Relock Door

SECTION [006]: OPTION [6]

The locking device will remain unlatched during the Door Unlocked Period (see section 5.2.2 on page 16), but once the door is opened it can be programmed to latch as soon as the door closes or latch immediately even if the door has not closed.

*Option **[6]** OFF = Locking device latches immediately (default)*
Option **[6]** ON = Locking device latches when door closes

### 5.2.5 Door Unlocked Schedule

SECTION [017]

The Door Unlocked Schedule determines the hours, days, and holidays that the door will remain unlocked. Therefore, users will not have to present their Access Control Cards to the reader in order to gain access to an Access Control Door during the Door Unlocked Schedule. The schedule consists of two programmable time periods called “Intervals” that determine the time of day and which days the users will be granted access. When a schedule is programmed with “H”, users will have access during the days programmed in the control panel (refer to the *DGP-848 or DGP-NE96 Reference & Installation Manual*).
Program the Start Time and End Time according to the 24-hour clock within the same day. Use *Feature Select Programming* to set the options representing the Days.

| Option | Day | Option | Day |
|---|---|---|---|
| **[1]** | Sunday (S) | **[5]** | Thursday (T) |
| **[2]** | Monday (M) | **[6]** | Friday (F) |
| **[3]** | Tuesday (T) | **[7]** | Saturday (S) |
| **[4]** | Wednesday (W) | **[8]** | Holidays (H) |

For example, program:

- Interval A: Start time **07:00**, End time **16:00**, Days **M**, **T**, **W**, **T**, & **F**
- Interval B: Start time **10:00**, End time **17:00**, Days **S**, **S**, & **H**

The door will stay unlocked on Monday, Tuesday, Wednesday, Thursday, and Friday between 7AM and 4PM and on Saturday, Sunday, and Holidays between 10AM and 5PM. Therefore, users will not have to present their Access Control Cards during the Door Unlocked Schedule.

### 5.2.6 Card Activates Door Unlocked Schedule

SECTION [006]: OPTION [1]

When the *Door Unlocked Schedule* is programmed and this option is enabled, the door is locked until the first valid Access Control Card is presented. Once the door is unlocked, it will remain unlocked until the end of the schedule.

Example: The schedule is 7AM to 5PM Monday to Friday, option **[1]** is enabled, and a valid Access Control Card is presented to the reader at 8AM on Monday. Although the schedule started at 7AM, the door remained locked from 7AM to 8AM. Once access was granted at 8AM, the door remained unlocked until 5PM.

Option **[1]** OFF = The Schedule activates without Card

*Option **[1]** ON = Card activates Door Unlocked Schedule (default)*

## 5.3 Door Left Open Options

The Door Left Open Options allow you to program how the system will react to an Access Control door left open.

### 5.3.1 Door Left Open Access Alarm

SECTION [006]: OPTION [2]

When an Access Control door is opened after an Access Granted or a Request for Exit, an Access Alarm can be generated if it is not closed within a certain period of time (see section 5.3.2 on page 19). When the Door Left Open Alarm is disabled, the following sections are also disabled:

| Section | |
|---|---|
| **[004]** | Option **[3]** Door Left Open Pre-alarm |
| | Option **[5]** Door Left Open Alarm |
| | Option **[6]** Door Left Open Alarm follows |
| **[010]** | Door Left Open Interval |
| **[011]** | Door Left Open Pre-alarm Timer |
| **[012]** | Beep Timer for Door Left Open Alarm |

*Option **[2]** OFF = Door Left Open Alarm won't be generated (default)*

Option **[2]** ON = Door Left Open Alarm is enabled

### 5.3.2 Door Left Open Interval Before Access Alarm

SECTION [010]

The Door Left Open Interval is the time that a door can remain open after an Access Granted or a Request for Exit without generating an Access Alarm. Enter any value between 001 and 255 to determine the number of seconds the door may remain open before the Access Alarm is triggered. *Default = 60 secs.*

### 5.3.3 Door Left Open Pre-Alarm

SECTION [004]: OPTION [3]

If an Access Control door is programmed with a Door Left Open Interval (see section 5.3.2 above), the Pre-Alarm will cause the

reader to beep a certain time before the end of the Door Left Open Interval to alert users that the Access Control door was left open and will generate an Access Alarm if it is not closed. The Pre-Alarm beeps slower than the Door Left Open Alarm (about twice every second). Program the Pre-Alarm timer in section [011].

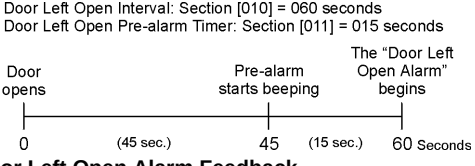
Option **[3]** OFF = The Pre-Alarm will not be generated
*Option **[3]** ON = Pre-Alarm is enabled (default)*

### 5.3.4 Door Left Open Pre-Alarm Timer

SECTION [011]

This timer will trigger the Door Left Open Pre-Alarm before the end of the Door Left Open Interval (see section 5.3.3 above). For example, if 60 seconds is programmed in section **[010]** and 15 seconds is programmed in section **[011]**, the reader will start beeping after the door has been open for 45 seconds (60 - 15 = 45 seconds). Enter any value between 001 and 255 to determine the seconds before the expiry of the Door Left Open Interval that the reader will beep. *Default = 15 seconds.*

**Figure 6: Pre-Alarm example**




### 5.3.5 Door Left Open Alarm Feedback

SECTION [004]: OPTIONS [5] AND [6]

An Access Control door is programmed with a Door Left Open Interval (see section 5.3.2 on page 19). Once this interval has expired, the Door Left Open Alarm can be either audible or silent

and will either beep as long as the Access Alarm is occurring or follow the Beep Timer in section **[012]**. The sound of the Door Left Open Alarm resembles the rapid beep generated during the last ten seconds of the Exit Delay. When the door is closed during an Access Alarm, the Door Left Open Restore event can be logged in the Event Buffer.

Option **[5]** OFF = The Door Left Open Alarm is silent
*Option **[5]** ON = The Door Left Open Alarm is audible (default)*

If option **[5]** is enabled:
*Option **[6]** OFF = Beep as long as the Door Left Open Alarm is occurring (default)*
Option **[6]** ON = Door Left Open Alarm follows Beep Timer (section [012])

### 5.3.6 Beep Timer For Door Left Open Alarm

SECTION [012]

This beep timer determines the amount of time the Door Left Open Alarm will beep. Once the Door Left Open Interval (see section 5.3.2 on page 19) has expired, the Door Left Open Alarm (see section 5.3.5 on page 20) will be triggered. Enter any value between 001 and 255 to determine the number of seconds the Access Alarm will beep. *Default = 5 seconds.*

## 5.4 Door Forced Open Options

The Door Forced Open Options allow you to program how the system will react when an Access Control door is opened without a “Request for Exit” or “Access Granted” signal.

### 5.4.1 Door Forced Open Access Alarm

SECTION [006]: OPTION [3]

If an Access Control door is opened without an Access Control Card, a User Access Code or receiving a Request for Exit, an Access Alarm can be generated. A Burglar Alarm can also be generated. When the door is closed during an Access Alarm, the Door Forced Open Restore event can be logged in the Event Buffer. When the Door Forced Open Alarm is disabled, the following sections are also disabled:

| Section | |
|---|---|
| **[004]** | Option **[7]** Door Forced Open Alarm |
| | Option **[8]** Door Forced Open Alarm follows |
| **[013]** | Beep Timer for Door Forced Open Alarm |

*Option **[3]** OFF = Door Forced Open Alarm is disabled (default)*
Option **[3]** ON = Door Forced Open Alarm is enabled

### 5.4.2 Door Forced Open Feedback

SECTION [004]: OPTIONS [7] AND [8]

The Access Alarm can be either audible or silent and will either beep as long as the Access Alarm is occurring or follow the Beep Timer in section **[013]**. The sound of the Door Forced Open Alarm resembles the rapid beep generated during the last ten seconds of the Exit Delay.

Option **[7]** OFF = Door Forced Open Alarm is silent
*Option **[7]** ON = Door Forced Open Alarm is audible (default)*

If option **[7]** is enabled:
*Option **[8]** OFF = Will beep as long as Door Forced Open Alarm is occurring (default)*
Option **[8]** ON = Door Forced Open Alarm follows Beep Timer. (section [013])

### 5.4.3 Beep Timer For Door Forced Open Alarm

SECTION [013]

This Beep Timer determines the amount of time the Door Forced Open Alarm (see section 5.4.2 above) will beep. Enter any value between 001 and 255 to determine the number of seconds the Door Forced Open Alarm will beep. *Default = 5 seconds.*

## 5.5 PIN Entry ON Keypad

SECTION [006]: OPTION [*4*]

If the *Card and Code Access* option is enabled in the DGP-NE96 control panel (refer to the *Access Control* section in the *DGP-NE96 Reference & Installation Manual*), users must present their access control card and then enter their PIN on the DGP2-641R keypad to gain access. The PIN Entry on Keypad option cannot be turned ON and will always be OFF.

# 6.0 MESSAGE PROGRAMMING

SECTIONS [101] TO [396]

Each section from [101] to [396] contains one message with a maximum of 16 characters. For more details and to record any changes, use the *Digiplex Series Modules' Programming Guide*.

Section **[101]** to **[148]** = Zone 01 to Zone 48 respectively
Section **[200]** = Paradox Family
Section **[201]** to **[204]** = First, Second, Third, & Fourth Area (partition) respectively
Section **[301]** to **[396]** = Code 01 to Code 96 respectively

After entering the section corresponding to the desired message, the message can be re-programmed to suit your installation needs as detailed in Table 1. For example, section **[101]** "ZONE 01" can be changed to "FRONT DOOR".

**Table 1: Message Programming**

| Key | Press Key Once | Press Key Twice | Press Key Three Times |
|---|---|---|---|
| **[1]** | **A** | **B** | **C** |
| **[2]** | **D** | **E** | **F** |
| **[3]** | **G** | **H** | **I** |
| **[4]** | **J** | **K** | **L** |
| **[5]** | **M** | **N** | **O** |
| **[6]** | **P** | **Q** | **R** |
| **[7]** | **S** | **T** | **U** |
| **[8]** | **V** | **W** | **X** |
| **[9]** | **Y** | **Z** | |
| Also, see special functions on the next page. | | | |

*The DGP-NE96 control panel has up to 8 partitions, 96 zones and up to 999 user codes. This LCD keypad module only allows you to program the messages for up to 4 partitions, 48 zones and 96 user codes. The rest of the messages can be programmed directly into the DGP-NE96 control panel. Refer to the DGP-NE96 Reference & Installation Manual and to the DGP-NE96 Programming Guide for more details.*

**[STAY]** - Insert Space
Pressing the **[STAY]** key inserts a blank space in the current cursor position.

**[FORCE]** - Delete
Pressing the **[FORCE]** key will delete the character or blank space found at the current cursor position.

**[ARM]** - Delete Until the End
Pressing the **[ARM]** key will delete all characters and spaces to the right of the cursor and at the cursor's position.

**[DISARM]** - Numeric Keys / Alphanumeric Keys
Every time the **[DISARM]** key is pressed it will toggle numeric keys to alphanumeric keys and vice versa. Numeric: Keys **[0]** to **[9]** represent numbers 0 to 9.

**[BYP]** - Lower Case / Upper Case
Every time the **[BYP]** key is pressed it will toggle the case setting from lower to upper case and vice versa.

**[MEM]** - Special Characters
After pressing the **[MEM]** key, the cursor will turn into a flashing black square. Using Table 2 on the following page, enter the 3-digit number that represents the desired symbol.

## Table 2: Special Characters Catalog

| 032 | 048 Ø | 064 ∂ | 080 P | 096 ` | 112 p | 128 Û | 144 Ê | 160 – | 176 § | 192 Φ | 208 · |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 033 ! | 049 1 | 065 A | 081 Q | 097 a | 113 q | 129 Ù | 145 È | 161 Î | 177 ¯ | 193 L· | 209 |
| 034 " | 050 2 | 066 B | 082 R | 098 b | 114 r | 130 Ú | 146 É | 162 Ì | 178 ij | 194 ↻ | 210 ° |
| 035 # | 051 3 | 067 C | 083 S | 099 c | 115 s | 131 Ü | 147 Ë | 163 í | 179 ↑ | 195 ↻ | 211 · |
| 036 $ | 052 4 | 068 D | 084 T | 100 d | 116 t | 132 û | 148 ê | 164 Ï | 180 ↓ | 196 ˅ | 212 · |
| 037 % | 053 5 | 069 E | 085 U | 101 e | 117 u | 133 ù | 149 è | 165 ì | 181 ↵ | 197 ® | 213 |
| 038 & | 054 6 | 070 F | 086 V | 102 f | 118 v | 134 ú | 150 é | 166 Ñ | 182 ˄ | 198 ˘ | 214 ÷ |
| 039 ’ | 055 7 | 071 G | 087 W | 103 g | 119 w | 135 Ô | 151 ë | 167 ñ | 183 ˂ | 199 ¯ | 215 |
| 040 ( | 056 8 | 072 H | 088 X | 104 h | 120 x | 136 Ò | 152 Å | 168 Ñ | 184 → | 200 ˃ | 216 |
| 041 ) | 057 9 | 073 I | 089 Y | 105 i | 121 y | 137 Ó | 153 Ä | 169 ˚ | 185 ↓ | 201 Ø | 217 ·] |
| 042 * | 058 : | 074 J | 090 Z | 106 j | 122 z | 138 ˘ | 154 å | 170 ˘ | 186 ↑ | 202 ˘ | 218 \ |
| 043 + | 059 ; | 075 K | 091 [ | 107 k | 123 { | 139 ˚ | 155 â | 171 ˅ | 187 ↓ | 203 Å | 219 x |
| 044 , | 060 < | 076 L | 092 * | 108 l | 124 \| | 140 ˚ | 156 à | 172 ˅ | 188 ↰ | 204 ˃ | 220 ® |
| 045 - | 061 = | 077 M | 093 ] | 109 m | 125 } | 141 ˚ | 157 á | 173 ˜ | 189 ½ | 205 a | 221 © |
| 046 . | 062 > | 078 N | 094 ^ | 110 n | 126 → | 142 ˚ | 158 ä | 174 Ω | 190 ⅟ | 206 Ô | 222 ™ |
| 047 / | 063 ? | 079 O | 095 _ | 111 o | 127 ← | 143 ¿ | 159 A | 175 ˄ | 191 ⅛ | 207 ◊ | 223 ☰ |

# 7.0 PROGRAMMING SECTIONS

△ = Default setting

**SECTION [001]: Keypad Partition Assignment**

| Option | | OFF | ON |
|---|---|---|---|
| **[1]** | *Partition 1* | ☐ Disabled | △ **Enabled** |
| **[2]** | *Partition 2* | ☐ Disabled | △ **Enabled** |
| **[3]** | *Partition 3* | ☐ Disabled | △ **Enabled** |
| **[4]** | *Partition 4* | ☐ Disabled | △ **Enabled** |
| **[5]** | *Partition 5 (DGP-NE96 only)* | ☐ Disabled | △ **Enabled** |
| **[6]** | *Partition 6 (DGP-NE96 only)* | ☐ Disabled | △ **Enabled** |
| **[7]** | *Partition 7 (DGP-NE96 only)* | ☐ Disabled | △ **Enabled** |
| **[8]** | *Partition 8 (DGP-NE96 only)* | ☐ Disabled | △ **Enabled** |

**SECTION [002]: Assigning Doors to Partitions**

| Option | | OFF | ON |
|---|---|---|---|
| **[1]** | *Door Assigned to Partition 1* | ☐ Disabled | △ **Enabled** |
| **[2]** | *Door Assigned to Partition 2* | △ **Disabled** | ☐ Enabled |
| **[3]** | *Door Assigned to Partition 3* | △ **Disabled** | ☐ Enabled |
| **[4]** | *Door Assigned to Partition 4* | △ **Disabled** | ☐ Enabled |
| **[5]** | *Door Assigned to Partition 5 (DGP-NE96 only)* | △ **Disabled** | ☐ Enabled |
| **[6]** | *Door Assigned to Partition 6 (DGP-NE96 only)* | △ **Disabled** | ☐ Enabled |
| **[7]** | *Door Assigned to Partition 7 (DGP-NE96 only)* | △ **Disabled** | ☐ Enabled |
| **[8]** | *Door Assigned to Partition 8 (DGP-NE96 only)* | △ **Disabled** | ☐ Enabled |

△ = Default setting

## SECTION [003]: General Options 1

| Option | | OFF | ON |
|---|---|---|---|
| [1] | *Display code entry* | △ **Disabled** | ☐ Enabled |
| [2] | *Display exit delay* | △ **Disabled** | ☐ Enabled |
| [3] | *Display entry delay* | △ **Disabled** | ☐ Enabled |
| [4] | *Confidential Mode (not for UL installations)* | △ **Disabled** | ☐ Enabled |
| [5] | *To exit Confidential Mode* | △ **Enter code** | ☐ Press button |
| [6] | *Future use* | ☐ N/A | ☐ N/A |
| [7] | *Future use* | ☐ N/A | ☐ N/A |
| [8] | *Time display option* | △ **yy/mm/dd** | ☐ dd/mm/yy |

## SECTION [004]: General Options 2

| Option | | OFF | ON |
|---|---|---|---|
| [1] | *Muting* | △ **Disabled** | ☐ Enabled |
| [2] | *Exit Delay Beep* | ☐ Disabled | △ **Enabled** |
| [3] | *Door Left Open Pre-Alarm* | ☐ Disabled | △ **Enabled** |
| [4] | *Chime on Zone Closure* | △ **Disabled** | ☐ Enabled |
| [5] | *Door Left Open Alarm Feedback* | ☐ Silent | △ **Audible** |
| [6] | *Door Left Open Alarm Follows* | △ **Alarm restore** | ☐ Beep Timer |
| [7] | *Door Forced Alarm* | ☐ Silent | △ **Audible** |
| [8] | *Door Forced Alarm* | △ **Alarm restore** | ☐ Beep Timer |

△ = Default setting

## SECTION [005]: Beep on Trouble

| Option | | OFF | ON |
|---|---|---|---|
| **[1]** | *System & Clock Trouble Beep* | △ **Disabled** | ☐ Enabled |
| **[2]** | *Communicator Trouble Beep* | △ **Disabled** | ☐ Enabled |
| **[3]** | *Module & Combus Trouble Beep* | △ **Disabled** | ☐ Enabled |
| **[4]** | *All Zone Trouble Beep* | △ **Disabled** | ☐ Enabled |
| **[5]** | *Future use* | ☐ N/A | ☐ N/A |
| **[6]** | *Future use* | ☐ N/A | ☐ N/A |
| **[7]** | *Time Format* | △ **24Hr. clock** | ☐ 12Hr. clock |
| **[8]** | *Future use* | ☐ N/A | ☐ N/A |

## SECTION [006]: General Options 3

| Option | | OFF | ON |
|---|---|---|---|
| **[1]** | *Card Activates Door Unlocked Schedule* | ☐ Disabled | △ **Enabled** |
| **[2]** | *Door Left Open Alarm* | △ **Disabled** | ☐ Enabled |
| **[3]** | *Door Forced Open Alarm* | △ **Disabled** | ☐ Enabled |
| **[4]** | *PIN Entry On Keypad**** | △ **Enabled** | |
| **[5]** | *Keypad Tamper* | △ **Disabled** | ☐ Enabled |
| **[6]** | *Relock Door* | △ **Disabled** | ☐ Enabled |
| **[7]** | *Future use* | ☐ N/A | ☐ N/A |
| **[8]** | *Unlock on REX* | △ **Disabled** | ☐ Enabled |

**** This option cannot be turned ON and will always remain OFF.***

**Section [007]: Confidential Mode Timer**

____/____/____ (005 to 255 seconds) *Default: 120 secs.*

**Section [008]: Door Unlocked Period**

____/____/____ (000 to 255 seconds) *Default: 005 secs.*

**Section [009]: Door Unlocked Period Extension**

____/____/____ (000 to 255 seconds added to section [008]) *Default: 015 secs.*

**Section [010]: Door Left Open Interval**

____/____/____ (000 to 255 seconds) *Default: 060 secs.*

**Section [011]: Door Left Open Pre-Alarm Timer**

____/____/____ (000 to 255 seconds) *Default: 015 secs.*

**Section [012]: Beep Timer for Door Left Open Alarm**

____/____/____ (000 to 255 seconds) *Default: 005 secs.*

**Section [013]: Beep Timer for Door Forced Open Alarm**

____/____/____ (000 to 255 seconds) *Default: 005 secs.*

**Section [017]: Door Unlocked Schedule**

| | Start Time | End Time | Days (turn ON or OFF) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | **S** | **M** | **T** | **W** | **T** | **F** | **S** | **H** |
| Schedule A: | ___ ___: ___ ___ | ___ ___: ___ ___ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Schedule B: | ___ ___: ___ ___ | ___ ___: ___ ___ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Section **[510]**: Download from Memory Key (PMC-3) to DGP2-641R.
Section **[520]**: Upload from DGP2-641R to Memory Key (PMC-3).

# 8.0 GLOSSARY

**Access Alarm**: An audible or silent warning generated by the keypad to indicate that a protected door has not closed within the programmed time allowed or that a protected door was opened without an “Access Granted” or “Request for Exit” signal. If the Access Alarm is programmed to be audible, the keypad assigned to the door can beep. This event is logged in the Event Buffer.

**Access Control**: A system designed to monitor and control the admission through specific doors.

**Access Control card**: A tag assigned to a User Access Code used to identify the user to the Access Control system. By presenting the tag to a reader, the system can verify whether the tag is valid (see Valid Access Control Card).

**Access Denied**: An Access Control term for the system’s refusal to admit access through a protected door.

**Access Granted**: An Access Control term for the system permitting admission through a protected door.

**Access Level**: The combination of Access Control doors that will be assigned to users through their User Access Codes. Users will only be permitted to enter through the protected doors that are programmed in their Access Level.

**Burglar Alarm**: An audible or silent warning sent to the control panel indicating that an armed zone in the system has been breached. This event is logged in the Event Buffer and can be reported to a Monitoring Station.

**Door Left Open**: Each Access Control door is programmed with a period of time it is allowed to remain open. Once the door has been open past this time limit, an Access Alarm will be triggered.

**Event Buffer**: The user-initiated actions, alarms, and troubles that occur in the system are saved in the control panel’s memory: the Event Buffer. To view the events you must enter the Event Record Display (see *DGP-848 or DGP-NE96 Reference & Installation Manual*).

**Forced Door**: If a protected door was opened without an “Access Granted” or “Request for Exit” signal, a silent or audible Access Alarm can be triggered. If the Access Alarm is programmed to be audible, the reader assigned to the door can beep. This event is logged in the Event Buffer and cannot be reported to a Monitoring Station unless the door is also assigned to a zone. If the door is assigned to a zone, the Forced Door can also trigger a Burglar Alarm in the system.

**Holidays**: Days programmed in the control panel that are not considered normal work days, such as legal, religious, and feast days.

**Pre-Alarm**: A beep tone warning that an Access Alarm will be generated if a protected door is not closed within a specified period.

**Reader**: An Access Control device normally located near a protected door that serves to relay the information from an Access Control card presented to it to the control panel. The DGP2-641R has a reader built in and does not require an external reader.

**Request for Exit**: When a REX device (Paradoor 460) installed above an Access Control door within a protected area detects movement, it sends a signal to the control panel to permit a user to leave the protected area. This signal is a “Request for Exit” event that is logged in the Event Buffer and cannot be reported to a Monitoring Station.

**Schedule**: Schedules determine the hours, days, and holidays that users are permitted access.

**Valid Card**: An Access Control card presented to the keypad during its assigned Schedule and within its assigned Access Level.

**Warranty**

Paradox Security Systems Ltd. (“Seller”) warrants its products to be free from defects in materials and workmanship under normal use for a period of one year. Except as specifically stated herein, all express or implied warranties whatsoever, statutory or otherwise, including without limitation, any implied warranty of merchantability and fitness for a particular purpose, are expressly excluded. Because Seller does not install or connect the products and because the products may be used in conjunction with products not manufactured by Seller, Seller cannot guarantee the performance of the security system **a**nd shall not be responsible for circumstances resulting from the product’s inability to operate. Seller obligation and liability under this warranty is expressly limited to repairing or replacing, at Seller's option, any product not meeting the specifications. Returns must include proof of purchase and be within the warranty period. In no event shall the Seller be liable to the buyer or any other person for any loss or damages whether direct or indirect or consequential or incidental, including without limitation, any damages for lost profits stolen goods, or claims by any other party, caused by defective goods or otherwise arising from the improper, incorrect or otherwise faulty installation or use of the merchandise sold.

Notwithstanding the preceding paragraph, the Seller’s maximum liability will be strictly limited to the purchase price of the defective product. Your use of this product signifies your acceptance of this warranty.

***BEWARE: Dealers, installers and/or others selling the product are not authorized to modify this warranty or make additional warranties that are binding on the Seller.**

© 2004 Paradox Security Systems Ltd.

Digiplex is a trademarks and/or registered trademarks of Paradox Security Systems Ltd. and its affiliates in Canada, the United States and other countries. All rights reserved.

NOTES

P▲R▲D O X®
SECURITY SYSTEMS
780 Industriel Blvd., Saint-Eustache (Quebec) J7R 5V3 CANADA
Tel.: (450) 491-7444 www.paradox.ca Fax: (450) 491-2313
Printed in Canada - 07/2004 DGP2641R-EI00